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## NOTICE OF ALLOWANCE AND FEE(S) DUE

23838

7590

04/03/2009

KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005

EXAMINER					
NGUYEN, HOANG M					
ART UNIT	PAPER NUMBER				

3748

DATE MAILED: 04/03/2009

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

10/589,333 07/25/2007 Masahiro Ogawa 960/216 6520

TITLE OF INVENTION: BRAYTON CYCLE DEVICE AND EXHAUST HEAT ENERGY RECOVERY DEVICE FOR INTERNAL COMBUSTION ENGINE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth tions.	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees v pondence address;	vill be and/or	mailed to the current (b) indicating a sepa	correspondence a cate "FEE ADDI	address as RESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fee(	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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KENYON & K 1500 K STREET SUITE 700	Γ N.W.		I he Stat addi tran	reby certify that these Postal Service weeksed to the Mail smitted to the USP	is Fee(s vith suf Stop TO (57	s) Transmig of Trans s) Transmittal is being ficient postage for fir ISSUE FEE address 1) 273-2885, on the d	g deposited with to st class mail in an above, or being ate indicated belo	the United renvelope facsimile w.
WASHINGTON	N, DC 20005						(Depos	sitor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATIO	N NO.
10/589,333	07/25/2007	•	Masahiro Ogawa		•	960/216	6520	
TITLE OF INVENTION ENGINE	N: BRAYTON CYCLE	DEVICE AND EXHAU	JST HEAT ENERGY RE	COVERY DEVIC	E FOR	R INTERNAL COMI	BUSTION	
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	07/06/20	009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
NGUYEN,	HOANG M	3748	060-618000					
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>		(1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto	2. For printing on the patent front page, list  (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
PLEASE NOTE: Un recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee oletion of this form is NO	THE PATENT (print or type data will appear on the perton as substitute for filing an (B) RESIDENCE: (CITY)	atent. If an assign assignment. and STATE OR C	COUNT	'RY)		
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Co	orporati	on or other private gro	oup entity 🖵 Go	vernment
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			o. Payment of Fee(s): (Plead A check is enclosed.  Payment by credit car  The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched. required fee(s), any de		
**	s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long	-				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	ne applicant; a regi	stered a	attorney or agent; or th	e assignee or oth	er party in
Authorized Signature				Date				_
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This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but 7 irginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to th NOT SEND FEES OR	on is required to obtain or r 1.1.4. This collection is est depending upon the indive Chief Information Office COMPLETED FORMS TO	etain a benefit by t imated to take 12 r idual case. Any co r, U.S. Patent and D THIS ADDRESS	he publ minutes omment Traden S. SENI	ic which is to file (and to complete, including s on the amount of the lark Office, U.S. Dep D TO: Commissioner	by the USPTO to g gathering, prep ne you require to artment of Comm for Patents, P.O. 1	o process) aring, and complete ierce, P.O. Box 1450.

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10/589,333	07/25/2007	Masahiro Ogawa	960/216	6520
23838 75	90 04/03/2009		EXAM	INER
KENYON & KENYON LLP			NGUYEN,	HOANG M
1500 K STREET N	J.W.		ART UNIT	PAPER NUMBER
SUITE 700 WASHINGTON, DC 20005		3748	0	
,			DATE MAILED: 04/03/200	9

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)				
	10/589,333	OGAWA ET AL.				
Notice of Allowability	Examiner	Art Unit				
	Hoang M. Nguyen	3748				
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIPLY of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 3/2/09.	(OR REMAINS) CLOSED in or other appropriate common GHTS. This application is s	n this application. If not included unication will be mailed in due course. I				
2. ☑ The allowed claim(s) is/are <u>1,4-7,10,15,19,21,24 and 28</u> .						
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority unally All b)  Some* c) None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ul>	been received. been received in Application	on No	the			
* Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EXA	AMINER'S AMENDMENT or NOTICE C				
<ul> <li>5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a)  hereto or 2)  to Paper No./Mail Date</li> <li>(b)  hereto or 2)  to Paper No./Mail Date</li> <li>(dentifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>						
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☑ Examiner's Comment Regarding Requirement for Deposit of Biological Material 2/26/09	6. ☐ Interview S Paper No 7. ☐ Examiner's	formal Patent Application ummary (PTO-413), 'Mail Date Amendment/Comment Statement of Reasons for Allowance				

Art Unit: 3748

### STATEMENT OF REASONS FOR ALLOWANCE

After carefully considering the applied references, it's concluded that it would not have been obvious to combine the references to come up with the claimed invention without hindsight reconstruction.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/ Primary Examiner, Art Unit 3748

> HOANG NGUYEN PRIMARY EXAMINER ART UNIT 3748

Hoang Minh Nguyen 4/4/2009